

**REMARKS**

Applicants thank the Examiner for acknowledging the claim for priority under 35 U.S.C. § 119, and receipt of certified copies of the priority document submitted March 12, 2004. However, Applicants note that the Examiner has not checked box 12)a) on the Office Action Summary page, which indicates that “All” copies of the priority document have been received. Applicants respectfully request that the Examiner check this box (or its equivalent) on any further actions regarding this Application.

Applicants thank the Examiner for considering the reference cited with the *Information Disclosure Statement* filed March 12, 2004.

**Status of the Application**

Claims 1-49 are all the claims pending in the Application, as claims 46-49 are hereby added. Claims 1-45 stand rejected.

**Obviousness Rejection**

The Examiner has rejected claims 1-45 under 35 U.S.C. § 103(a) as being unpatentable over *Goto* (US 6,553,173 B1; hereinafter “*Goto*”). This rejection is respectfully traversed.

**Independent Claim 1**

Regarding independent claim 1, the Examiner takes the position that *Goto* discloses most of the features therein, but concedes that *Goto* “fails to disclose a pressing body comprising a protrusion, formed on a first surface thereof, and extending substantially perpendicularly to the groove” (O.A., p. 4).

Nevertheless, the Examiner alleges that one of ordinary skill in the art at the time of the invention (“one of skill”):

would have found it obvious to use the fixing device disclosed by Goto with any desired fixing device since, Goto mentioned that in column 4, “This pressing plate 20 has a v-grooved 21 [sic] corresponding to the v-groove 11 of the v-groove substrate section 10a. Column 5, lines 50-58, mentioned that using such groove in the pressing plate (i.e., protrusion) is [sic] possible to reduce stress or the like generated by the pressure applied to the optical fiber 1, and thus it becomes possible to reduce excess loss due to the pressure at the time of fixing the optical fiber in the installation.

Applicants respectfully disagree with the Examiner, for several reasons.

First, it has long been held that, “to establish *prima facie* obviousness of the claimed invention, all the claim limitations must be taught or suggested by the prior art.” *In re Royka*, 490 F.2d 981 (CCPA 1974). In this instance, the Examiner has cited no reference that teaches or suggests any particular “protrusion,” such as that recited in independent claim 1.<sup>1</sup>

Second, it has long been held that, if the “proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) MPEP § 2143.01. In this instance, *Goto* discloses a configuration where an optical fiber 1 is held within a cavity formed by V-grooves 21a, 21b, 11a and 11b, and resin is injected into expanding V-grooves 21b and 11b, to thereby fix substrate 10, optical fiber 1, and pressing plate 20 together. However, if this structure was somehow modified to include a “protrusion” such as is recited in independent claim 1, the protrusion would necessarily replace at least one pair of the V-grooves 21a/21b or 11a/11b, in order to interface with the optical fiber 1. In such a case, the optical fiber would no longer be contained within a cavity that would allow

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<sup>1</sup> Nor has the Examiner taken “official notice” that such protrusions exist in the prior art.

the injection of resin therein. Thus, the entire purpose of *Goto* - to join all of the substrate 10, optical fiber 1, and pressing plate 20 together - would be destroyed.

Third, the Examiner's alleged motivation to modify the configuration of *Goto* - to reduce stress on the optical fiber 1 - is specifically accomplished by the specific configuration of *Goto* (by providing fixing sections 11b and 21b). Thus, one of skill would not have been motivated to modify *Goto* to provide a feature that it already possesses.

Accordingly, Applicants respectfully submit that one of skill would not have been motivated to modify *Goto* as the Examiner alleges, and therefore that independent claim 1 is patentable over *Goto*.

Dependent Claims 2-31

Applicants respectfully submit that rejected dependent claims 2-31 are: (1) allowable at least by virtue of their dependency; and (2) separately patentable in view of the features recited therein.

For example, regarding dependent claim 6, while the Examiner has not specifically indicated any correspondence between features of *Goto* and the features recited herein, Applicants believe that he is reading *Goto*'s: (1) groove 11a as the recited "first groove;" and (2) groove 11b as the recited "second groove" (or *vice versa*). However, Applicants respectfully disagree with such a comparison, as both grooves 11a and 11b do not "axially support the optical fiber simultaneously." Rather, only groove 11a axially supports optical fiber 1.

Further, Applicants respectfully submit that the surface of substrate 10 in which groove 11a is formed is not arranged "above, and laterally adjacent to" the surface of substrate 10 in which groove 11b is formed (or *vice versa*). Rather, the surface of substrate 10 appears to be

continuous along both grooves 11a and 11b. Accordingly, Applicants respectfully submit that claim 6 is separately patentable over *Goto*.

Additionally, regarding dependent claim 28, Applicants respectfully submit that *Goto*'s plate 20 cannot reasonably be read as being formed of "sloped portions configured to interface with the second groove to align the optical fiber therein." Rather, plate 20 only shows grooves 21a and 21b formed therein, which do not "interface with the second groove" in any way. Accordingly, Applicants respectfully submit that claim 28 is separately patentable over *Goto*.

*Independent Claim 32*

Regarding independent claim 32, as noted above with respect to claim 6, Applicants believe that the Examiner is reading *Goto*'s: (1) groove 11a as the recited "first groove;" and (2) groove 11b as the recited "second groove" (or *vice versa*). However, Applicants disagree with such a comparison, as both grooves 11a and 11b do not "axially support the optical fiber simultaneously." Rather, only groove 11a axially supports optical fiber 1. Further, as noted above with respect to claim 28, Applicants can find no portion of *Goto*'s plate 20 that is comparable to the recited "guide portion," which is formed of "sloped portions configured to interface with the second groove to align the optical fiber therein." Rather, plate 20 only discloses grooves 21a and 21b formed therein, which do not "interface with the second groove." Accordingly, Applicants respectfully submit that independent claim 32 is patentable over *Goto*.

*Dependent Claims 33-45*

Applicants respectfully submit that rejected dependent claims 33-45 are: (1) allowable at least by virtue of their dependency; and (2) separately patentable in view of the features recited therein.

For example, regarding dependent claim 33, as mentioned above with respect to claim 6, Applicants respectfully submit that the surface of substrate 10 in which groove 11a is formed is not arranged “above, and laterally adjacent to” the surface of substrate 10 in which groove 11b is formed (or *vice versa*). Accordingly, Applicants respectfully submit that claim 33 is separately patentable over *Goto*.

Regarding claim 36, Applicants respectfully submit that *Goto* fails to teach or suggest any configuration that could reasonably be read as showing that “a ridgeline of the optical fiber protrudes out of the first groove above the first surface of the fixing body, and is contained within the second groove below the second surface of the fixing body.” Rather, as shown in FIGS. 3A and 3B, the ridgeline of optical fiber 1 is clearly above any upper surface of substrate 10 in both of the grooves 11a and 11b. Accordingly, Applicants respectfully submit that claim 36 is separately patentable over *Goto*.

### **New Claims**

Claims 46-49 are hereby added. Claims 46-49 are fully supported by the instant Application, and are respectfully submitted to be allowable both by virtue of their dependency, and by virtue of the features recited therein.

### **Conclusion**

In view of the foregoing, it is respectfully submitted that claims 1-49 are allowable. Thus, it is respectfully submitted that the application now is in condition for allowance with all of the claims 1-49.

Amendment Under 37 C.F.R. § 1.111  
U.S. Application No. 10/798,422

Attorney Docket No. Q79112

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,



Timothy P. Cremen  
Registration No. 50,855

SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, D.C. 20037-3213  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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